

The following listing of claims will replace all prior versions, and listings, of claims in the application:

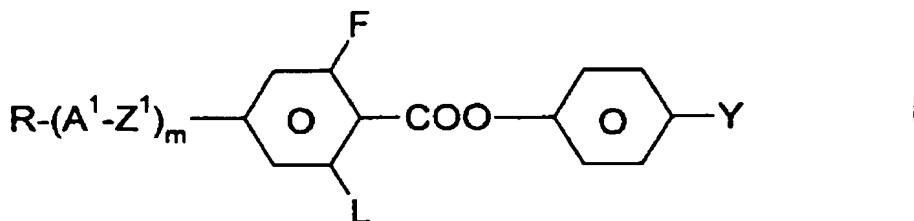
Listing of Claims:

Claims 1-22. (Cancelled):

23. (Currently Amended): A medium according to Claim 28 ~~4~~, wherein said medium has a nematic phase down to -20°C, a clearing point above 80°C, and a dielectric anisotropy value $\Delta\epsilon$ of ≥ 4 .

24. (Currently Amended): A liquid-crystalline medium ~~according to Claim 23,~~ comprising:

at least one phenol ester of formula I



in which

R is H, an alkyl or alkenyl radical having up to 15 carbon atoms which is unsubstituted, monosubstituted by CN or CF₃ or at least monosubstituted by halogen, where, in addition, one or more CH₂ groups are optionally replaced by -O-, -S-, -CH=CH-, -C≡C-, -OC-O- or -O-CO- in such a way that O atoms are not linked directly to one another,

A¹ a) is a 1,4-cyclohexenylene or 1,4-cyclohexylene radical, in which in each case one or two non-adjacent CH₂ groups are each optionally replaced by -O- or -S-,

b) _____ is a 1,4-phenylene radical, in which one or two CH are each optionally replaced by N,

c) _____ is a piperidine-1,4-diyl, 1,4-bicyclo[2.2.2]octylene, naphthalene-2,6-diyl, decahydronaphthalene-2,6-diyl or 1,2,3,4-tetrahydronaphthalene-2,6-diyl radical,

where the radicals a), b) and c) are in each case unsubstituted or monosubstituted or polysubstituted by halogen atoms,

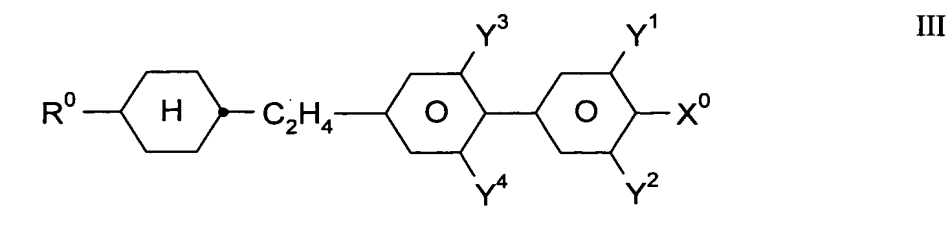
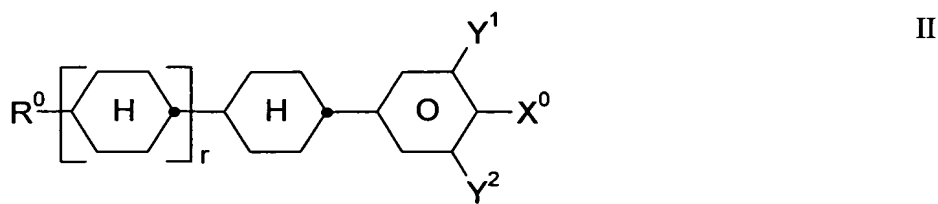
Z^1 _____ is -CO-O-, -O-CO-, -CF₂O-, -OCF₂-, -CH₂O-, -OCH₂-, -CH₂CH₂-, -C₂F₄-, -C₂F₂-, -CH=CH-, -C≡C- or a single bond,

Y _____ is F, Cl, or a monohalogenated or polyhalogenated alkyl, alkenyl, alkenyloxy or alkoxy radical having 1 to 5 carbon atoms,

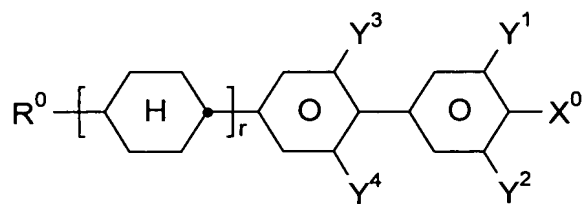
L _____ is H or F, and

m _____ is 0, 1 or 2; and

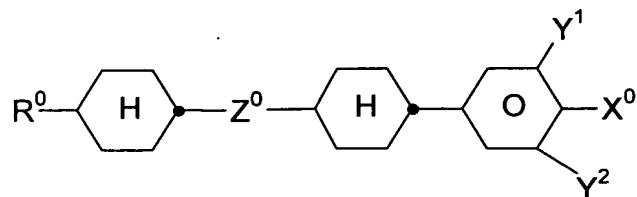
one or more compounds selected from formulae II, III, IV, V, VI, VII, VIII and IX:



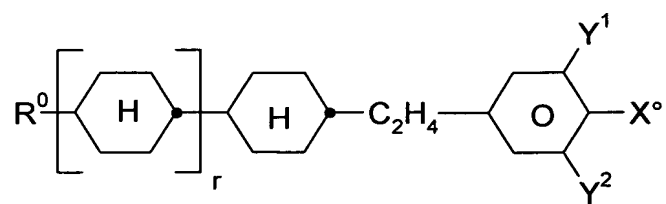
IV



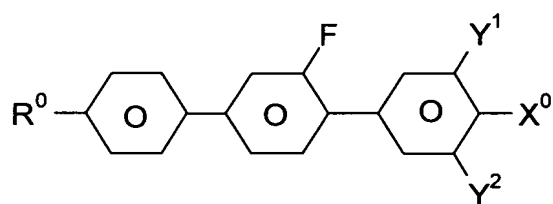
V



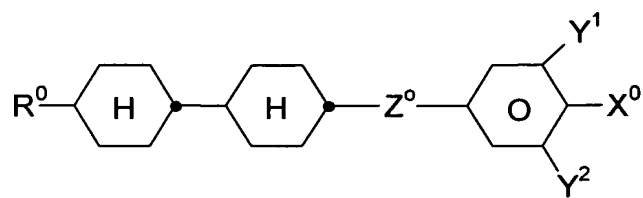
VI



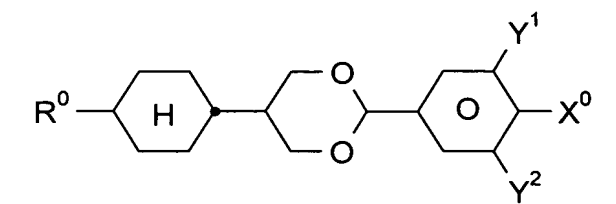
VII



VIII



IX



wherein

R⁰ is n-alkyl, oxaalkyl, fluoroalkyl, alkenyloxy or alkenyl, each having up to 9 carbon atoms,

X⁰ is F, Cl, or halogenated alkyl, halogenated alkenyl, halogenated or halogenated alkoxy, in each case having up to 6 carbon atoms,

Z⁰ is -C₂H₄-, -C₂F₄-, -CF₂O-, -OCF₂- or -COO-,

Y¹, Y²,

Y³ and Y⁴ are each, independently of one another, H or F, and

r is 0 or 1;

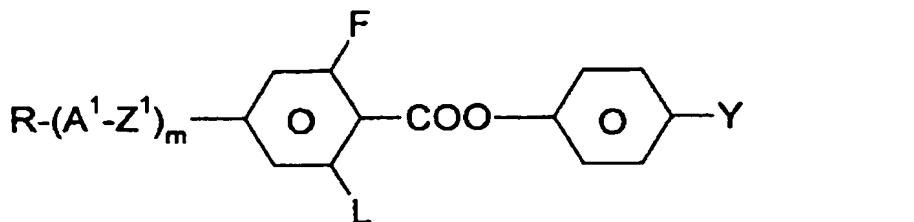
wherein said medium has a nematic phase down to -30°C, ~~and~~ a clearing point above 90°C, ~~and a dielectric anisotropy value $\Delta\epsilon$ of ≥ 4 .~~

25. (Currently Amended): A medium according to Claim ~~24~~ 23, wherein said medium has a nematic phase down to -40°C, and a clearing point above 100°C.

26. (Currently Amended): A medium according to Claim ~~24~~ 23, wherein said medium has a dielectric anisotropy values $\Delta\epsilon$ of ≥ 6 .

27. (Currently Amended): A medium according to Claim ~~24~~ 1, wherein said medium has a TN threshold below 1.5 V.

28. (Currently Amended): ~~A liquid-crystalline medium according to Claim 27,~~
comprising:
at least one phenol ester of formula I



in which

R is H, an alkyl or alkenyl radical having up to 15 carbon atoms which is unsubstituted, monosubstituted by CN or CF₃ or at least monosubstituted by halogen, where, in addition, one or more CH₂ groups are optionally replaced by -O-, -S-, -CH=CH-, -C≡C-, -OC-O- or -O-CO- in such a way that O atoms are not linked directly to one another,

A^I a) is a 1,4-cyclohexenylene or 1,4-cyclohexylene radical, in which in each case one or two non-adjacent CH₂ groups are each optionally replaced by -O- or -S-,

b) is a 1,4-phenylene radical, in which one or two CH are each optionally replaced by N,

c) is a piperidine-1,4-diyl, 1,4-bicyclo[2.2.2]octylene, naphthalene-2,6-diyl, decahydronaphthalene-2,6-diyl or 1,2,3,4-tetrahydronaphthalene-2,6-diyl radical,

where the radicals a), b) and c) are in each case unsubstituted or monosubstituted or polysubstituted by halogen atoms,

Z^I is -CO-O-, -O-CO-, -CF₂O-, -OCF₂-, -CH₂O-, -OCH₂-, -CH₂CH₂-, -C₂F₄-, -C₂F₂-, -CH=CH-, -C≡C- or a single bond,

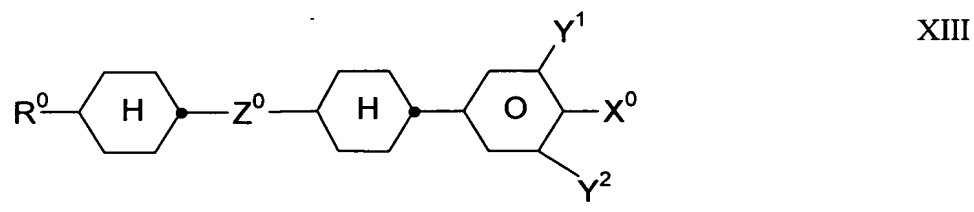
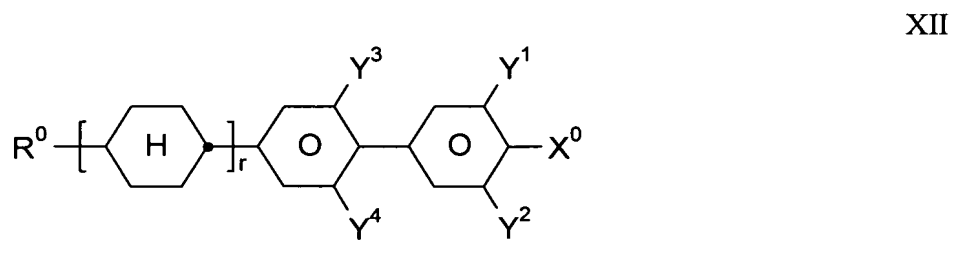
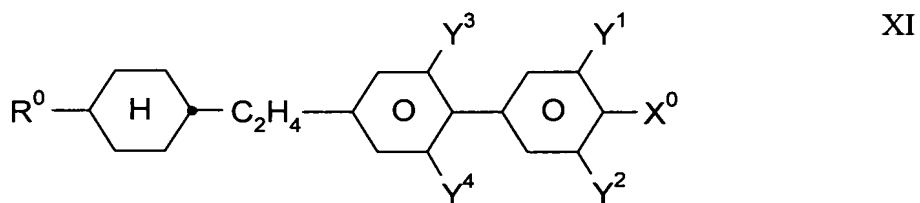
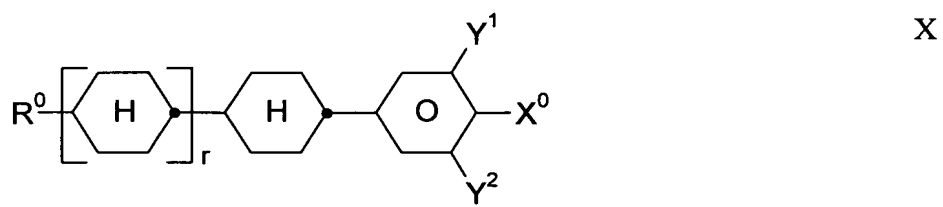
Y is F, Cl, or a monohalogenated or polyhalogenated alkyl, alkenyl, alkenyloxy

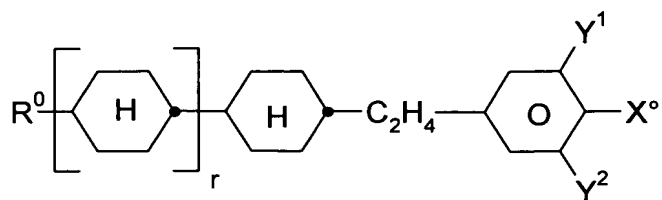
or alkoxy radical having 1 to 5 carbon atoms.

L is H or F, and

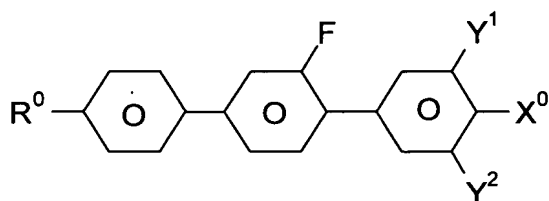
m is 0, 1 or 2; and

one or more compounds selected from formulae II, III, IV, V, VI, VII, VIII and IX:

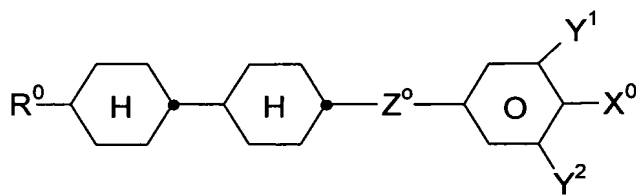




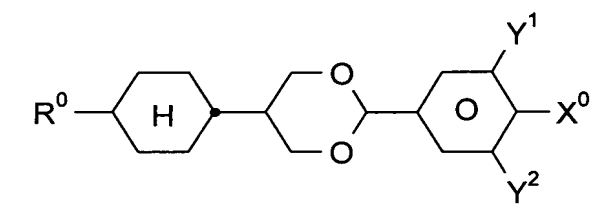
XIV



XV



XVI



XVII

wherein

R^0 is n-alkyl, oxaalkyl, fluoroalkyl, alkenyloxy or alkenyl, each having up to 9 carbon atoms,

X^0 is F, Cl, or halogenated alkyl, halogenated alkenyl, halogenated or halogenated alkoxy, in each case having up to 6 carbon atoms,

Z^0 is $-\text{C}_2\text{H}_4-$, $-\text{C}_2\text{F}_4-$, $-\text{CF}_2\text{O}-$, $-\text{OCF}_2-$ or $-\text{COO}-$,

$Y^1, Y^2,$

Y^3 and Y^4 are each, independently of one another, H or F, and

r is 0 or 1;

wherein said medium has a TN threshold below 1.3 V.

29. (Currently Amended): A medium according to Claim ~~28~~ 27, wherein said medium has a TN threshold < 1.0 V.

30. (Currently Amended): A medium according to Claim ~~24~~ 1, wherein the proportion of compounds of formula I in the medium is 5 to 50% by weight.

31. (Currently Amended): A medium according to Claim ~~24~~ 1, wherein the proportion of compounds of the formulae II to IX in the medium is 30 to 70% by weight.

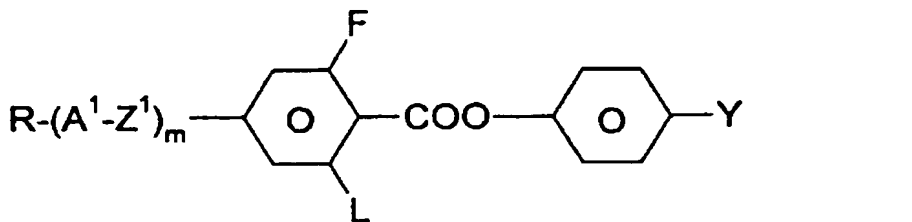
32. (Currently Amended): A medium according to Claim ~~24~~ 1, wherein the flow viscosity ν_{20} at 20°C of the medium is < 60 mm²·s⁻¹.

33. (Currently Amended): A medium according to Claim ~~24~~ 1, wherein the flow viscosity ν_{20} at 20°C of the medium is < 50 mm²·s⁻¹.

34. (Currently Amended): A medium according to Claim ~~24~~ 1, wherein the nematic phase range of the medium is at least 90°.

35. (Currently Amended): A medium according to Claim ~~24~~ 1, wherein the nematic phase range of the medium is at least 100°.

36. (Currently Amended): A liquid-crystalline medium ~~according to Claim 1,~~
comprising:
at least one phenol ester of formula I



in which

R is H, an alkyl or alkenyl radical having up to 15 carbon atoms which is unsubstituted, monosubstituted by CN or CF₃ or at least monosubstituted by halogen, where, in addition, one or more CH₂ groups are optionally replaced by -O-, -S-, -CH=CH-, -C≡C-, -OC-O- or -O-CO- in such a way that O atoms are not linked directly to one another,

A¹ a) is a 1,4-cyclohexenylene or 1,4-cyclohexylene radical, in which in each case one or two non-adjacent CH₂ groups are each optionally replaced by -O- or -S-,

b) is a 1,4-phenylene radical, in which one or two CH are each optionally replaced by N,

c) is a piperidine-1,4-diyl, 1,4-bicyclo[2.2.2]octylene, naphthalene-2,6-diyl, decahydronaphthalene-2,6-diyl or 1,2,3,4-tetrahydronaphthalene-2,6-diyl radical,

where the radicals a), b) and c) are in each case unsubstituted or monosubstituted or polysubstituted by halogen atoms,

Z¹ is -CO-O-, -O-CO-, -CF₂O-, -OCF₂-, -CH₂O-, -OCH₂-, -CH₂CH₂-, -C₂F₄-, -C₂F₂-, -CH=CH-, -C≡C- or a single bond,

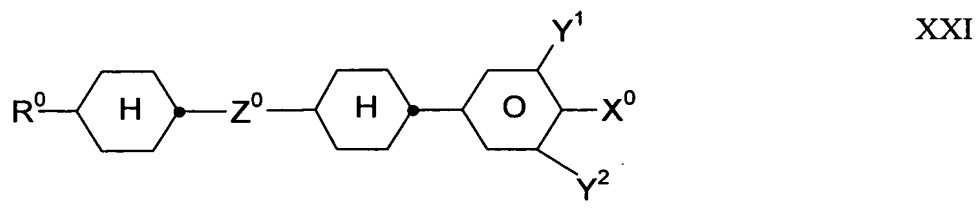
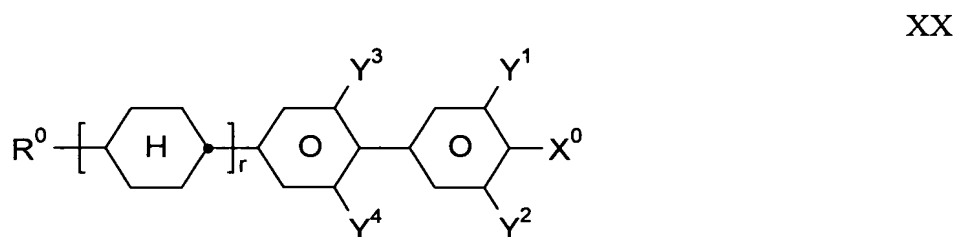
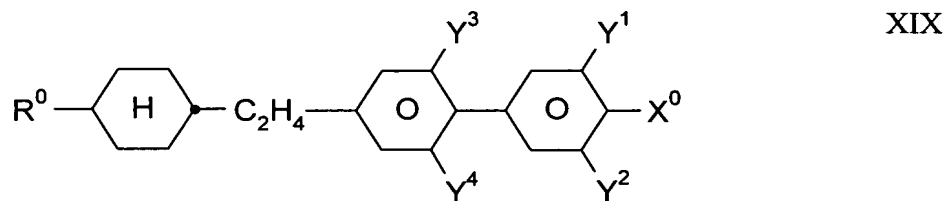
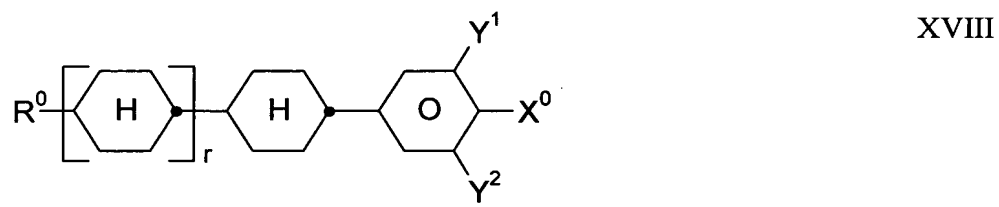
Y is F, Cl, or a monohalogenated or polyhalogenated alkyl, alkenyl, alkenyloxy

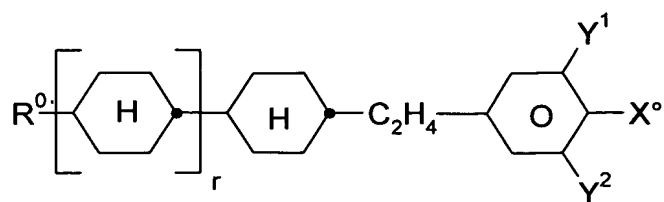
or alkoxy radical having 1 to 5 carbon atoms,

L is H or F, and

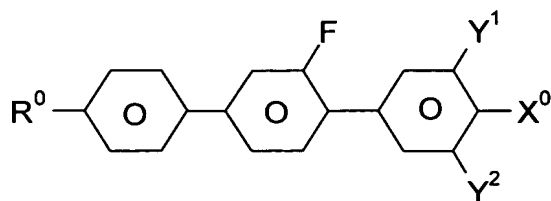
m is 0, 1 or 2; and

one or more compounds selected from formulae II, III, IV, V, VI, VII, VIII and IX:

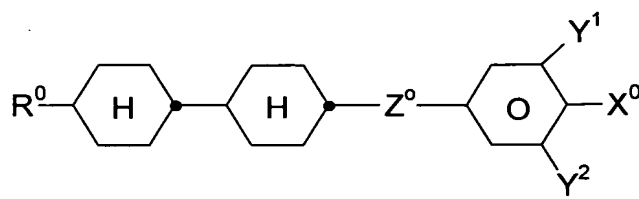




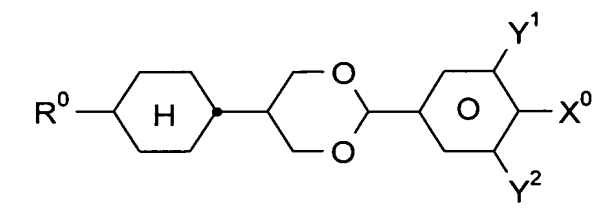
XXII



XXIII



XXIV



XXV

wherein

R^0 is n-alkyl, oxaalkyl, fluoroalkyl, alkenyloxy or alkenyl, each having up to 9 carbon atoms,

X^0 is F, Cl, or halogenated alkyl, halogenated alkenyl, halogenated or halogenated alkoxy, in each case having up to 6 carbon atoms,

Z^0 is $-C_2H_4-$, $-C_2F_4-$, $-CF_2O-$, $-OCF_2-$ or $-COO-$,

$Y^1, Y^2,$

Y^3 and Y^4 are each, independently of one another, H or F, and

r is 0 or 1;

wherein the nematic phase range of the medium is extends at least from -30° to $+80^{\circ}$.

37. (Currently Amended): A medium according to Claim 24 ~~1~~, wherein said medium contains two or more of compounds of the formula I, and the proportion of compounds of formula I in the medium is 5-95%.

38. (Currently Amended): A medium according to Claim 24 ~~1~~, wherein said medium contains two or more of compounds of the formula I, and the proportion of compounds of formula I in the medium is 10-60%.

39. (Currently Amended): A medium according to Claim 24 ~~1~~, wherein said medium contains two or more of compounds of the formula I, and the proportion of compounds of formula I in the medium is 20-50%.

40. (Currently Amended): A medium according to Claim 24 ~~1~~, wherein said medium has an optical anisotropy of 0.0892-0.1050.

41. (Cancelled):

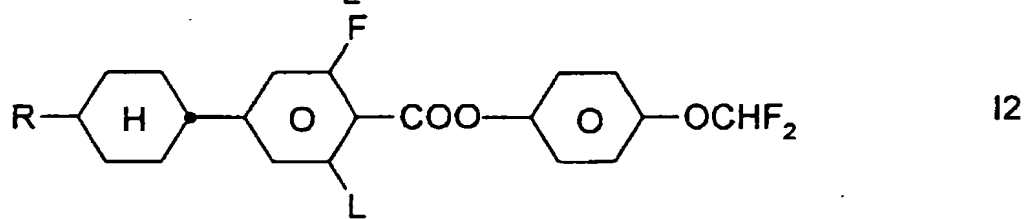
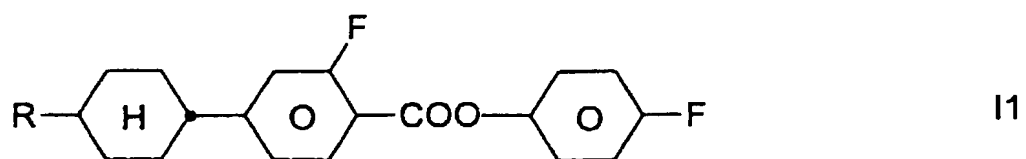
42. (New): A liquid-crystalline medium according to Claim 24, wherein R is a straight-chain alkyl radical having from 1 to 10 carbon atoms or an alkenyl radical having from 2 to 10 carbon atoms.

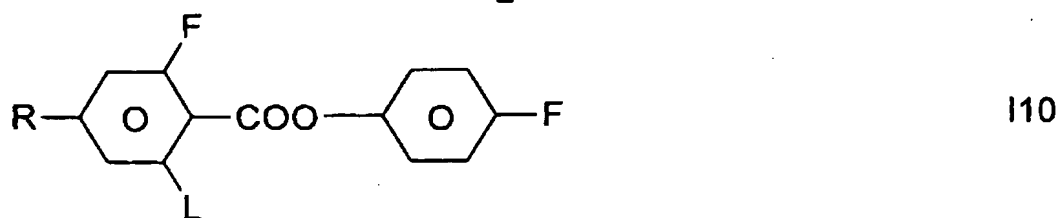
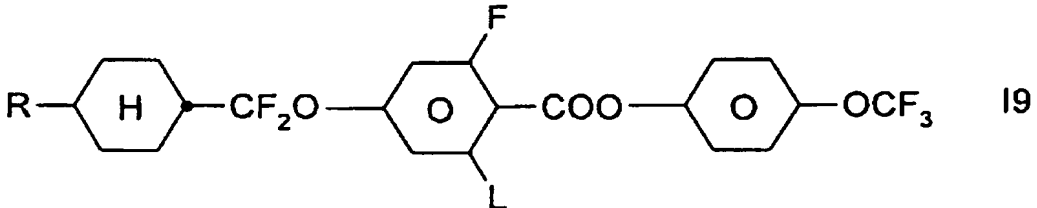
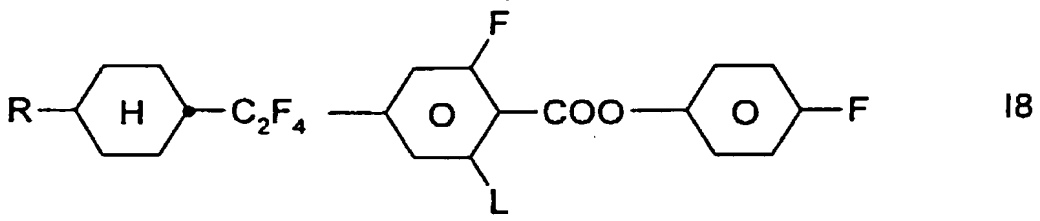
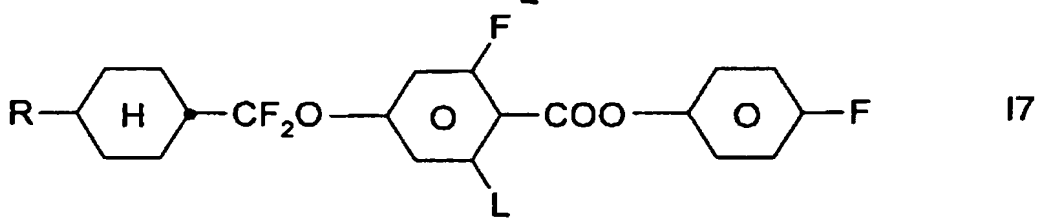
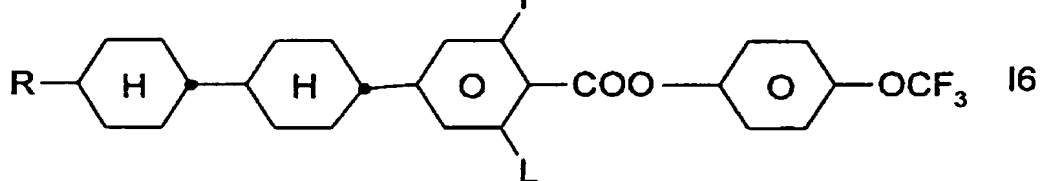
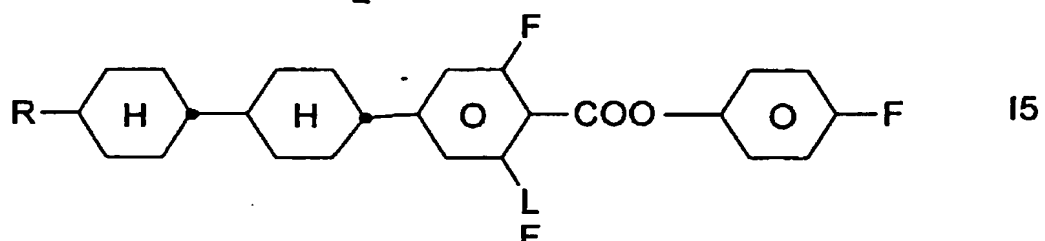
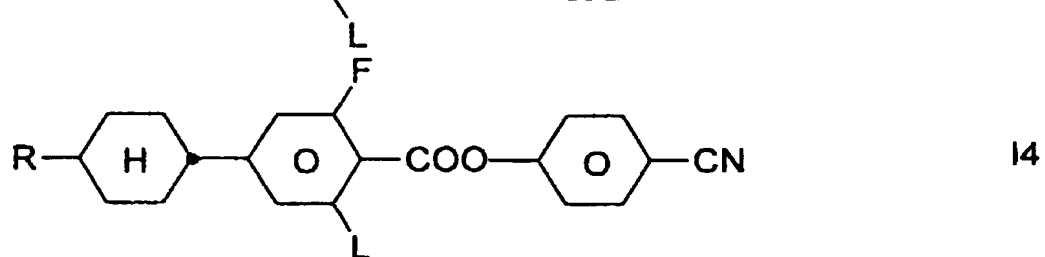
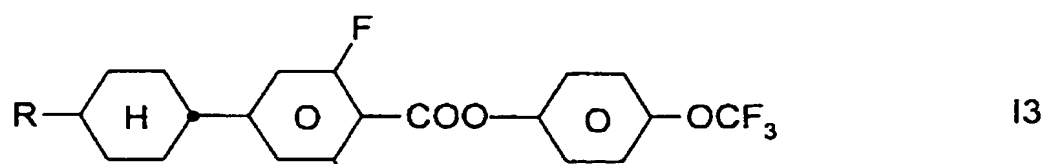
43. (New): A liquid-crystalline medium according to Claim 24, wherein Y is F, Cl, CF₃, CF₂H, OCF₃, OCF₂H, OCFHCF₃, OCFHCFH₂, OCFHCF₂H, OCF₂CH₃, OCF₂CFH₂, OCF₂CF₂H, OCF₂CF₂CF₂H, OCF₂CF₂CFH₂, OCFHCF₂CF₃, OCFHCF₂CF₂H, OCF₂CF₂CF₃, OCF₂CHF₂CF₃ or OCCIFCF₂CF₃.

44. (New): A liquid-crystalline medium according to Claim 24, wherein m is 1.

45. (New): A liquid-crystalline medium according to Claim 24, wherein said

compound of formula I is selected from subformulae I1 to I12:





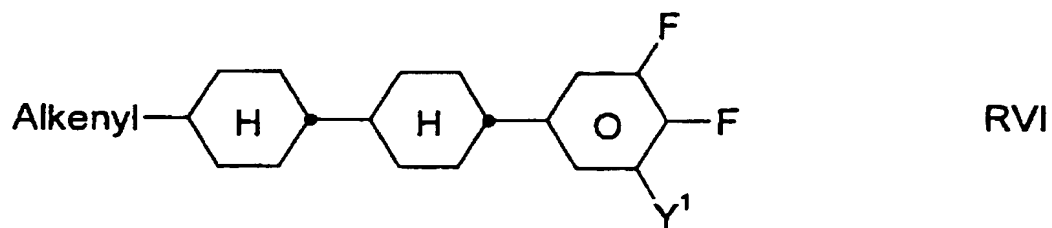
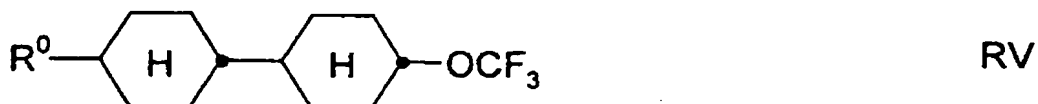
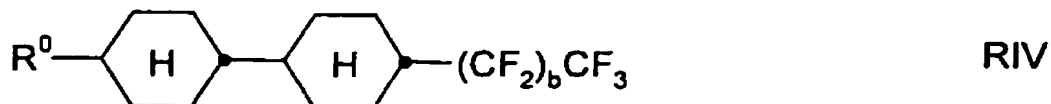
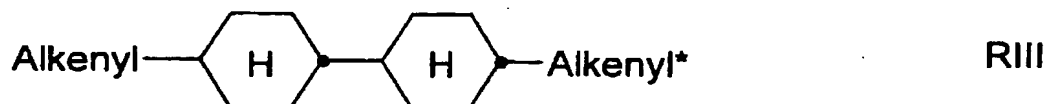
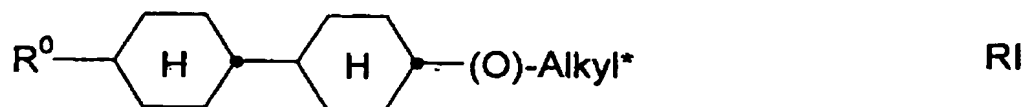


R is H, an alkyl or alkenyl radical having up to 15 carbon atoms which is unsubstituted, monosubstituted by CN or CF₃ or at least monosubstituted by halogen, where, in addition, one or more CH₂ groups are optionally replaced by -O-, -S-, -CH=CH-, -C≡C-, -OC-O- or -O-CO- in such a way that O atoms are not linked directly to one another,

L is H or F.

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47. (New): A medium according to Claim 24, wherein said medium additionally comprises one or more compounds of formulae RI to RVI



wherein

R^0 is n-alkyl, oxoalkyl, fluoroalkyl, alkenyloxy or alkenyl, in each case having up to 9 carbon atoms,

b is 0, 1 or 2,

Y^1 is H or F,

Alkyl* is a straight-chain alkyl radical having up to 9 carbon atoms,
and

Alkenyl or Alkenyl* is, in each case independently of one another, an alkenyl
radical having up to 9 carbon atoms.

48. (New): A medium according to Claim 24, wherein X^0 is F or OCF_3 and Y^2 is H or F.

49. (New): In a method of generating an electro-optical effect using a liquid-crystalline medium, the improvement wherein said liquid-crystalline medium is according to Claim 24.

50. (New): An electro-optical liquid-crystal display containing a liquid-crystalline medium, wherein said medium is according to Claim 24.

51. (New): A medium according to Claim 24, wherein L is F.

52. (New): A medium according to Claim 24, wherein m is 1.

53. (New): A medium according to Claim 24, wherein Z^1 is a single bond, $-CF_2O-$, $-OCF_2-$, $-C_2F_4-$, $-CH_2O-$, $-OCH_2-$ or $-COO-$.

54. (New): A medium according to Claim 24, wherein R is a straight-chain alkyl or straight-chain alkenyl radical which is monosubstituted by CN or CF_3 .

55. (New): A medium according to Claim 24, wherein R is a straight-chain alkyl or straight-chain alkenyl radical which is at least monosubstituted by F or Cl.

56. (New): A medium according to Claim 24, wherein Y is F, OCF₃, OCHF₂, CF₃, OCHF₂CF₃, OC₂F₅ or OCF₂CHFCF₃.

57. (New): A medium according to Claim 24, wherein R is straight-chain alkyl, alkoxy, alkenyloxy or alkenyl having up to 10 carbon atoms.

58. (New): A medium according to Claim 24, wherein A² is Phe, PheF, PheFF, Cyc, Che, Pyr, Dio, Dec or Nap,

Cyc is 1,4-cyclohexylene, Che is 1,4-cyclohexenylene, Dio is 1,3-dioxane-2,5-diyl, Phe is 1,4-phenylene radical, Pyr is pyrimidine-2,5-diyl, PheF is 2- or 3-fluoro-1,4-phenylene, PheFF is 2,3-difluoro- or 2,6-difluoro-1,4-phenylene, Nap is substituted or unsubstituted naphthalene, and Dec is decahydronaphthalene.

59. (New): A medium according to Claim 24, wherein said compound of formula I contains not more than one of the radicals Bi, Pyd, Pyr, Dio, Dit, Nap or Dec,

Dio is 1,3-dioxane-2,5-diyl, Dit is 1,3-dithiane-2,5-diyl, Pyd is pyridine-2,5-diyl, Pyr is pyrimidine-2,5-diyl, Bi is bicyclo[2.2.2]octylene, Nap is substituted or unsubstituted naphthalene, and Dec is decahydronaphthalene.

60. (New): A medium according to Claim 24, wherein A¹ is 2-fluoro-1,4-phenylene, 3-fluoro-1,4-phenylene, 2,3-difluoro-1,4-phenylene or 2,6-difluoro-1,4-phenylene.